

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. 00,1214)

PATENT

In re Application of: Welcher et al.)
Serial No.: Unassigned) Before the Examiner: Unassigned
Filed: November 28, 2000) Group Art Unit: Unassigned
For: Interleukin-1)
Receptor Antagonist-Like)
Molecules and Uses Thereof)



Assistant Commissioner for Patents
Washington, D.C. 20231

Sir/Madam:

STATEMENT UNDER 37 C.F.R. § 1.821

The undersigned representative hereby declares that the content of the paper and computer readable copies of the Sequence Listing, submitted in the above-identified application in accordance with 37 C.F.R. §§ 1.821(c) and (e), respectively, are identical in content. The 3.5" diskette contains an IBM compatible dos-text file of the sequence listing named "001214seq.txt."

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff

By:

Kevin E. Noonan, Ph.D.
Reg. No. 35,303

Dated: November 28, 2000

SEQUENCE LISTING

<110> Welcher, Andrew A.
Jing, Shuqian
Luethy, Roland

<120> Interleukin-1 Receptor Antagonist-Like Molecules and
Uses Thereof

<130> 00-1214

<140>
<141>

<150> 60/170,052
<151> 1999-12-10

<160> 18

<170> PatentIn Ver. 2.0

<210> 1
<211> 1244
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (301)..(774)

<400> 1
gtgttgcctcc actgtcagtc ctccagagcc tcaagagatc tttgggcat atcagcttc 60
tttccaaaat gaacacacccc aggggcagga aagaatgctc tttccttggt cattaagggg 120
cctgggagtc ctggaccagc tttcatgca gcttagaccac ttacatgcaa ctagagcctt 180
gactttgaaa cgagggacaa aagcatctct tgctaaaggt aacttctgct gcttagaacc 240
cagcctccctc accaccatct gatcttatctt gttctttca caaaaggctc tgaagacatc 300

atg aac cca caa cgg gag gca gca ccc aaa tcc tat gct att cgt gat 348
Met Asn Pro Gln Arg Glu Ala Ala Pro Lys Ser Tyr Ala Ile Arg Asp
1 5 10 15

tct cga cag atg gtg tgg gtc ctg agt gga aat tct tta ata gca gct 396
Ser Arg Gln Met Val Trp Val Leu Ser Gly Asn Ser Leu Ile Ala Ala
20 25 30

cct ctt agc cgc agc att aag cct gtc act ctt cat tta ata gcc tgt 444
Pro Leu Ser Arg Ser Ile Lys Pro Val Thr Leu His Leu Ile Ala Cys
35 40 45

aga gac aca gaa ttc agt gac aag gaa aag ggt aat atg gtt tac ctg 492
Arg Asp Thr Glu Phe Ser Asp Lys Glu Lys Gly Asn Met Val Tyr Leu
50 55 60

gga atc aag gga aaa gat ctc tgt ctc ttc tgt gca gaa att cag ggc		540
Gly Ile Lys Gly Lys Asp Leu Cys Leu Phe Cys Ala Glu Ile Gln Gly		
65	70	75
		80
aag cct act ttg cag ctt aag gaa aaa aat atc atg gac ctg tat gtg		588
Lys Pro Thr Leu Gln Leu Lys Glu Lys Asn Ile Met Asp Leu Tyr Val		
85	90	95
gag aag aaa gca cag aag ccc ttt ctc ttt ttc cac aat aaa gaa ggc		636
Glu Lys Lys Ala Gln Lys Pro Phe Leu Phe Phe His Asn Lys Glu Gly		
100	105	110
tcc act tct gtc ttt cag tca gtc tct tac cct ggc tgg ttc ata gcc		684
Ser Thr Ser Val Phe Gln Ser Val Ser Tyr Pro Gly Trp Phe Ile Ala		
115	120	125
acc tcc acc aca tca gga cag ccc atc ttt ctc acc aag gag aga ggc		732
Thr Ser Thr Ser Gly Gln Pro Ile Phe Leu Thr Lys Glu Arg Gly		
130	135	140
ata act aat aac act aac ttc tac tta gat tct gtg gaa taa		774
Ile Thr Asn Asn Thr Asn Phe Tyr Leu Asp Ser Val Glu		
145	150	155
atccagccta ggctgtgggt ggctggttcc aggatagaga atcaagctgt cagagtcata 834		
ttaacagatc attatgcgac tgagttcaact agcagttcag cccatccata gcttacctca 894		
ttcttactat ccaaaagcca cctcctcctc caaacatcca ttctgtacc aagaccctca 954		
ctcgaatgtc actatcccaa gatgaaacct aaaaatcaact ttccattctt tcttgatctt 1014		
accccaccat ccactcagct gccatgccca gtttagttaa ccccccaaat gctgcttcat 1074		
gcaaccttcc attcctattc ctttgccaa cccatgatgt agagatgtgg attcatgaca 1134		
ttttgttcat acaacttctt caataaaaca ttataatatg tgccccaaag ataaagctga 1194		
agaatgagat gaatgtgaaa ttaaaggaaa gcatgtcttc ctaatcctaa		1244

<210> 2
<211> 157
<212> PRT
<213> Homo sapiens

<400> 2
Met Asn Pro Gln Arg Glu Ala Ala Pro Lys Ser Tyr Ala Ile Arg Asp
1 5 10 15

Ser Arg Gln Met Val Trp Val Leu Ser Gly Asn Ser Leu Ile Ala Ala
20 25 30

Pro Leu Ser Arg Ser Ile Lys Pro Val Thr Leu His Leu Ile Ala Cys
35 40 45

Arg Asp Thr Glu Phe Ser Asp Lys Glu Lys Gly Asn Met Val Tyr Leu

50

55

60

Gly Ile Lys Gly Lys Asp Leu Cys Leu Phe Cys Ala Glu Ile Gln Gly
65 70 75 80

Lys Pro Thr Leu Gln Leu Lys Glu Lys Asn Ile Met Asp Leu Tyr Val
85 90 95

Glu Lys Lys Ala Gln Lys Pro Phe Leu Phe Phe His Asn Lys Glu Gly
100 105 110

Ser Thr Ser Val Phe Gln Ser Val Ser Tyr Pro Gly Trp Phe Ile Ala
115 120 125

Thr Ser Thr Ser Gly Gln Pro Ile Phe Leu Thr Lys Glu Arg Gly
130 135 140

Ile Thr Asn Asn Thr Asn Phe Tyr Leu Asp Ser Val Glu
145 150 155

<210> 3
<211> 164
<212> PRT
<213> Homo sapiens

<400> 3
Met Asn Pro Gln Arg Glu Ala Ala Pro Lys Ser Tyr Ala Ile Arg Asp
1 5 10 15

Ser Arg Gln Met Val Trp Val Leu Ser Gly Asn Ser Leu Ile Ala Ala
20 25 30

Pro Leu Ser Arg Ser Ile Lys Pro Val Thr Leu His Leu Ile Ala Cys
35 40 45

Arg Asp Thr Glu Phe Ser Asp Lys Glu Lys Gly Asn Met Val Tyr Leu
50 55 60

Gly Ile Lys Gly Lys Asp Leu Cys Leu Phe Cys Ala Glu Ile Gln Gly
65 70 75 80

Lys Pro Thr Leu Gln Leu Lys Leu Gln Gly Ser Gln Asp Asn Ile Gly
85 90 95

Lys Asp Thr Cys Trp Lys Leu Val Gly Ile His Thr Cys Ile Asn Leu
100 105 110

Asp Val Arg Glu Ser Cys Phe Met Gly Thr Leu Asp Gln Trp Gly Ile
115 120 125

Gly Val Gly Arg Lys Lys Trp Lys Ser Ser Phe Gln His His His Leu
130 135 140

Arg Lys Lys Asp Lys Asp Phe Ser Ser Met Arg Thr Asn Ile Gly Met
145 150 155 160

Pro Gly Arg Met

<210> 4
<211> 158
<212> PRT
<213> Homo sapiens

<400> 4
Met Glu Lys Ala Leu Lys Ile Asp Thr Pro Gln Gln Gly Ser Ile Gln
1 5 10 15

Asp Ile Asn His Arg Val Trp Val Leu Gln Asp Gln Thr Leu Ile Ala
20 25 30

Val Pro Arg Lys Asp Arg Met Ser Pro Val Thr Ile Ala Leu Ile Ser
35 40 45

Cys Arg His Val Glu Thr Leu Glu Lys Asp Arg Gly Asn Pro Ile Tyr
50 55 60

Leu Gly Leu Asn Gly Leu Asn Leu Cys Leu Met Cys Ala Lys Val Gly
65 70 75 80

Asp Gln Pro Thr Leu Gln Leu Lys Glu Lys Asp Ile Met Asp Leu Tyr
85 90 95

Asn Gln Pro Glu Pro Val Lys Ser Phe Leu Phe Tyr His Ser Gln Ser
100 105 110

Gly Arg Asn Ser Thr Phe Glu Ser Val Ala Phe Pro Gly Trp Phe Ile
115 120 125

Ala Val Ser Ser Glu Gly Gly Cys Pro Leu Ile Leu Thr Gln Glu Leu
130 135 140

Gly Lys Ala Asn Thr Thr Asp Phe Gly Leu Thr Met Leu Phe
145 150 155

<210> 5
<211> 177
<212> PRT
<213> Homo sapiens

<400> 5
Met Glu Ile Cys Arg Gly Leu Arg Ser His Leu Ile Thr Leu Leu Leu
1 5 10 15

Phe Leu Phe His Ser Glu Thr Ile Cys Arg Pro Ser Gly Arg Lys Ser
20 25 30

Ser Lys Met Gln Ala Phe Arg Ile Trp Asp Val Asn Gln Lys Thr Phe
35 40 45

Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly Pro Asn

50

55

60

Val Asn Leu Glu Glu Lys Ile Asp Val Val Pro Ile Glu Pro His Ala
65 70 75 80

Leu Phe Leu Gly Ile His Gly Gly Lys Met Cys Leu Ser Cys Val Lys
85 90 95

Ser Gly Asp Glu Thr Arg Leu Gln Leu Glu Ala Val Asn Ile Thr Asp
100 105 110

Leu Ser Glu Asn Arg Lys Gln Asp Lys Arg Phe Ala Phe Ile Arg Ser
115 120 125

Asp Ser Gly Pro Thr Thr Ser Phe Glu Ser Ala Ala Cys Pro Gly Trp
130 135 140

Phe Leu Cys Thr Ala Met Glu Ala Asp Gln Pro Val Ser Leu Thr Asn
145 150 155 160

Met Pro Asp Glu Gly Val Met Val Thr Lys Phe Tyr Phe Gln Glu Asp
165 170 175

Glu

<210> 6

<211> 153

<212> PRT

<213> Homo sapiens

<400> 6

Ala Pro Val Arg Ser Leu Asn Cys Thr Leu Arg Asp Ser Gln Gln Lys
1 5 10 15

Ser Leu Val Met Ser Gly Pro Tyr Glu Leu Lys Ala Leu His Leu Gln
20 25 30

Gly Gln Asp Met Glu Gln Gln Val Val Phe Ser Met Ser Phe Val Gln
35 40 45

Gly Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu
50 55 60

Lys Asn Leu Tyr Leu Ser Cys Val Leu Lys Asp Asp Lys Pro Thr Leu
65 70 75 80

Gln Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu
85 90 95

Lys Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe
100 105 110

Glu Ser Ala Gln Phe Pro Asn Trp Tyr Ile Ser Thr Ser Gln Ala Glu
115 120 125

Asn Met Pro Val Phe Leu Gly Gly Thr Lys Gly Gly Gln Asp Ile Thr
130 135 140

Asp Phe Thr Met Gln Phe Val Ser Ser
145 150

<210> 7
<211> 11
<212> PRT
<213> Human immunodeficiency virus type 1

<400> 7
Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg
1 5 10

<210> 8
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: internalizing
domain derived from HIV tat protein

<400> 8
Gly Gly Gly Gly Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg
1 5 10 15

<210> 9
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide 2362-94

<400> 9
catggacctg tatgtggaga aga 23

<210> 10
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide 2362-95

<400> 10
gccagggtaa gagactgact gaa 23

<210> 11
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide 870-02

<400> 11
agcggtataac aatttcacac agg 23

<210> 12
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide 2366-21

<400> 12
gcctaggctg gatttattcc acag 24

<210> 13
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide 1019-06

<400> 13
gctctaatac gactcaactat aggg 24

<210> 14
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide 2362-98

<400> 14
ctgatgtgggt ggaggtggct at 22

<210> 15
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide 1340-35

<400> 15
cccagtcacg acgttgtaaa acg

23

<210> 16
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide 1019-05

<400> 16
tgaatttagg tgacactata gaagag

26

<210> 17
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide 2379-15

<400> 17
gtcctccaga gcctaagag atc

23

<210> 18
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
Oligonucleotide 2375-10

<400> 18
ttaggattag gaagacatgc aaacc

25